AMENDMENT

In The Claims:

1. (Currently Amended) A computer-implemented method of classifying an item of unknown classification ~~from at least one class of interest~~ as authentic or spurious, comprising:

receiving input data representing items of known classification;

~~generating~~ processing the input data to generate an output representing class-specific probability distributions based on the received input data;

computing ~~constructing~~ a transform ~~for each class of interest~~ based on the output; and

transforming the probability distributions ~~from the at least one class of interest~~ onto a normalized scale based on the transform ~~for the at least one class of interest~~, the scale having a ~~plurality~~ range of values indicative of the authentic or spurious nature of the unclassified item and from which the item ~~can be~~ is classified.

2. (Currently Amended) A method according to claim 1, further comprising selecting at least one decision ~~criteria~~ criterion based on at least one value on the normalized scale and independent from the probability distributions from which the item of unknown classification is classified.

3. (Previously Presented) A method according to claim 1, wherein the step of transforming comprises:

defining at least two regions of the output; and

mapping the at least two regions onto the normalized scale.

4. (Previously Presented) A method according to claim 1, wherein the values of the normalized scale range from 0 to 100.

5. (Previously Presented) A method according to claim 3, wherein the mapping is performed through linear interpolation.

6. (Previously Presented) A method according to claim 3, wherein the at least two regions comprise varying degrees of authenticity.

7. (Previously Presented) The method of claim 1, wherein the input data further comprises at least one optional transform parameter.

8. (Previously Presented) The method of claim 1, wherein the normalized scale is linear in cumulative probability.

9. (Currently Amended) The method of claim 1, wherein the ~~at least two regions comprise a false-rejection region and a false-acceptance region, and wherein the~~ normalized scale is derived from ~~linear in~~ a ratio ~~of the false-rejection region to the false-acceptance region~~ based on the probability distributions.

10. (Currently Amended) A computer-implemented system adapted to classify an item of unknown classification ~~from at least one class of interest~~ as either authentic or spurious, comprising:

a pattern recognition system comprising a computer readable medium having computer readable program code embodied thereon, the computer readable program code, when executed, implementing on a computer a method of ~~adapted to receive~~ receiving input data representing items of known classification ~~and to generate~~;

generating an output representing class-specific probability distributions based on the received input data;

~~a transformer constructor adapted to receive the output of the pattern recognition system and construct~~; computing a transform ~~for each class of interest~~ based ~~thereon~~ on the output; and

~~a transformer adapted to receive and automatically~~ transforming the ~~class-specific~~ probability distributions onto a normalized scale based on the transform ~~for the at least one class of interest~~, the scale having a ~~plurality~~ range of values indicative of the authentic or spurious nature of the item of unknown classification and from which the item ~~can be~~ is classified.

11. (Currently Amended) The system according to claim 10, further comprising decision criteria selection means for selectively selecting at least one decision ~~criteria~~ criterion based on at least one value on the normalized scale and independent from the class-specific probability distributions from which the item of unknown classification is classified.

12. (Previously Presented) The system of claim 10, wherein the transformer constructor comprises means for combining the class-specific probability distributions.

13. (Previously Presented) The system of claim 12, wherein the transformer comprises:

means for defining at least two regions of the combined class-specific probability distributions; and

means for mapping the at least two regions onto the normalized scale.

14. (Previously Presented) The system of claim 10, wherein the values of the normalized scale range from 0 to 100.

15. (Previously Presented) The system of claim 1, wherein the transformer constructor is further adapted to receive input in the form of at least one optional transform parameter.

16. (Previously Presented) The system of claim 13, wherein the at least two regions represent varying degrees of authenticity.

17. (Previously Presented) The system of claim 10, wherein the normalized scale is linear in cumulative probability.

18. (Currently Amended) The system of claim 13, wherein the ~~at least two regions comprise a false-rejection region and a false-acceptance region, and wherein the~~ normalized scale is derived from ~~linear in~~ a ratio ~~of the false-rejection region to the false-acceptance region~~ based on the probability distributions.

19. (Currently Amended) The system of claim 11, wherein the at least one decision ~~criteria~~ criterion defines a single threshold number from which to determine whether the item of unknown classification is authentic or spurious.

20. (Currently Amended) A computer-implemented method of classifying an item of unknown classification ~~from at least one class of interest~~ as authentic or spurious, comprising:

receiving a plurality of output statistics from a pattern recognition system;

processing the output statistics to construct ~~constructing~~ a transform ~~for each class of items~~ based thereon ~~the output statistics~~;

applying the transform to the item of unknown classification whereby a new decision space is created; and

transforming the decision space into a normalized scale having a ~~plurality~~ range of values indicative of the authentic or spurious nature of the item and from which the item ~~can be~~ is classified.

21. (New) A computer system which embodies the method of claim 1.

22. (New) A computer program which, when executed by a computer, performs the method of claim 1.